Fields of Opportunities

STATE OF IOWA

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REPORTING PETROLEUM RELEASES FROM UST SYSTEMS

Reporting Promptly Protects the Public and the Environment

I. Reporting Requirements for Releases

Iowa law requires owners and operators of UST systems to report a confirmed or suspected release of "regulated substances," which includes petroleum, to the DNR within 24 hours or within 6 hours if a hazardous condition exists [567 Iowa Administrative Code (IAC)—135.6 & Iowa Code section 455B.386].[1]

This guidance is intended to help owners and operators (and others) determine what is a suspected release versus a confirmed release, and under what conditions a release becomes a "hazardous condition" triggering the 6-hour reporting requirement to the DNR and the local enforcement authority.

II. What is a Suspected Release and What are the Reporting Requirements?

Even though there is no obvious visual or olfactory evidence of a release—such as stained soils or a strong hydrocarbon odor—the presence of other indicators may suggest a release has occurred from the UST system. Below are examples of conditions qualifying as a "suspected release":

1. Vapor or product is detected in vapor monitoring or groundwater monitoring wells used for leak detection.
2. Inventory control discrepancies indicate that a release may have occurred (a gain or loss of product greater than 130 gallons + 1% of throughput).

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[1] Department Rules read as follows: **567—135.6(455B) Release reporting, investigation, and confirmation.**
135.6(1) *Reporting of suspected releases.* Owners and operators of UST systems must report to the department within 24 hours, or within 6 hours in accordance with 567—Chapter 131 if a hazardous condition exists as defined in 567—131.1(455B), or another reasonable time period specified by the department, and follow the procedures in 135.8(1) for any of the following conditions:
a. The discovery by owners and operators or others of released regulated substances at the UST site or in the surrounding area (such as the presence of free product or vapors in soils, basements, sewer and utility lines, and nearby surface water);
b. Unusual operating conditions observed by owners and operators (such as the erratic behavior of product dispensing equipment, the sudden loss of product from the UST system, or an unexplained presence of water in the tank), unless system equipment is found to be defective but not leaking, and is immediately repaired or replaced; and
c. Monitoring results from a release detection method required under 135.5(2) and 135.5(3) that indicate a release may have occurred unless:
(1) The monitoring device is found to be defective, and is immediately repaired, recalibrated or replaced, and additional monitoring does not confirm the initial result; or
(2) In the case of inventory control, a second month of data does not confirm the initial result.

3. Alarms from automatic tank gauging (ATG) systems, interstitial monitors, sump sensors, automatic line leak detector, etc. indicate that a release may have occurred.
4. Statistical inventory reconciliation (SIR) results indicate either a *Fail* or two consecutive *Inconclusive.*
5. Unexplained loss of product.
6. Unexplained presence of water in the tank or sump.
7. Product dispensing equipment does not dispense product or dispenses product at a greatly reduced rate.
8. Internal tank (periodic) inspection results reveal perforations, corrosion holes, weld failures, or other similar defects.

III. Suspected Release Investigation

Owners and operators must immediately investigate and confirm suspected releases. Make sure the monitoring device that declared a release is not defective and giving false indications of a release. If it is defective, get it recalibrated, repaired or replaced immediately and make sure subsequent monitoring shows no release. Your petroleum equipment service company is able to help you diagnose whether there is a problem with your monitoring equipment and whether the suspected release can be confirmed.

If the monitoring equipment is found to be operating properly, the suspected release or confirmed release must be reported to the DNR by phone or fax within 24 hours. Make sure to contact Emergency Response if the release creates a hazardous condition (see part VII. below). You should also contact your UST insurance company to inform them you have a suspected or confirmed release.

Shut down the product line if you suspect a release from the product piping (slow flow, failed test results, positive shutoff, alarm, etc.). Shut down the submersible pump and empty the tank if a sudden loss of product occurs from the tank or if test results indicate a “Fail.”

If there is a suspected release that cannot be explained due to defective monitoring equipment or the source of the release is unknown or uncertain, regulations require you to test your UST system to confirm if a leak has occurred. You must proceed with system tightness testing, which can detect a release at least as small as 0.1 gph in the tanks and/or product lines. If the precision test results are “Fail,” a site investigation may be necessary. The DNR will issue a letter requiring a site check. You must repair or replace defective equipment if the test indicates a leak has occurred in the system. Submit documentation of the repair or replacement to the DNR (e.g., invoice, 148 form, and installation checklist if necessary).

IV. What is a Confirmed Release and What are the Reporting Requirements?

A release can be confirmed when based on visual and olfactory observations it is evident that petroleum or other regulated substances have breached the UST system or come in contact with the surface material (concrete/asphalt), backfill material, soil, groundwater or surface water

or the system monitoring has confirmed a leak in the UST system that cannot be observed. The owner or operator must report the release to the DNR within 24 hours or six hours if a hazardous condition exists (see part VII below). Environmental evidence of a confirmed release includes:

1. Soil or groundwater sample analytical results for any petroleum constituent exceed the DNR's action levels [567—135.14].
2. There is a spill or overfill from the UST system.
3. There is an affected receptor (e.g., petroleum discovered in a utility trench, which can be attributed to the UST facility or the UST facility cannot be ruled out as a source).
4. Drinking water supplies are contaminated, which can be attributed to the UST facility or the UST facility cannot be ruled out as a source.
5. Vapors are observed in buildings or structures which can be attributed to the UST facility or the UST facility cannot be ruled out as a source.
6. Free product is observed in the environment or in monitoring well used for release detection or LUST monitoring.
7. Stained soil is observed.
8. A sheen is observed on surface water

V. Exceptions:

An aboveground release of petroleum from an UST facility does not need to be reported to DNR if it is less than 25 gallons, does not reach soil, groundwater or surface water, and is cleaned up within 24 hours and the facility retains records of the incident.

An overfill caused by a transporter filling an UST does not need to be reported to DNR if the spill is contained in the spill bucket of the UST and does not reach the backfill. A spill (e.g., a customer who overfills the vehicle's gas tank) of less than 25 gallons does not need to be reported if it is cleaned up within 24 hours and does not reach soil, groundwater or surface water. If a spill less than 25 gallons cannot be cleaned up within 24 hours, it must be reported.

VI. Confirmed Release Investigation

After reporting the confirmed release, take immediate action to prevent the spread of the release and danger to the public (e.g., fire, vapor and explosion hazards). If the public is in danger from a spill or overfill, immediately contact DNR's Emergency Response and the local enforcement authority. Shut down the pump for the suspected tank or product line. Investigate for free product in sumps and in under dispenser containment (UDC). Be mindful that you are investigating for the presence of flammable or combustible liquids. Avoid contact with the substance, and keep any ignition sources out of the area.

If the source of the release is the tank, contact your petroleum equipment service provider to have the tank emptied and to further investigate the problem. Upon receipt of the Release

Report Form, the DNR will complete a Preliminary Leaking Underground Storage Tank (LUST) Report, the information will be entered into the database, and the owner/operator will receive a letter in the mail requiring a Risk Based Corrective Action (RBCA) assessment.

VII. What is a Hazardous Condition Requiring Reporting within 6 Hours?

A hazardous condition is defined in 567 IAC—131.1 and means any situation where a suspected or actual release of a hazardous substance, such as petroleum, places the health and safety of the public or the environment in danger.[2]

An example of a hazardous condition is product floating on the groundwater in the tank pit or in a monitoring well; a sheen of product on a lake, in a stream or a river; product discovered in a sump, a monitoring well, or in the UDC; more than 25 gallons of product overfilling or spilling onto the ground; vapors or product present in a building, sewer or utility line. In any of these situations, imminent or potential danger exists to the public or the environment and must be reported immediately.

An overfill that occurs during product delivery and which is not contained by the spill bucket must be reported immediately by the transporter (See 567 IAC—135.6(4) and 567 IAC—131.1). A release of a hazardous substance must be reported within 6 hours.

Releases of petroleum from non-regulated sources such as heating oil tanks, aboveground storage tanks, and farm and residential tanks must also be reported to DNR within 6 hours if a hazardous condition exists. To report a release, contact Emergency Response, the field office in the region where the release occurred, and the UST Section at the DNR central office.

1. Emergency Response: (24 hour phone) 515.281.8694 or fax 515.725.0218
2. DNR Field Offices: (http://www.iowadnr.gov/fo/fomap.html) (See table below.)

Field Office	Phone	Fax	Field Office	Phone	Fax
1-Manchester	563.927.2640	563.927.2075	4-Atlantic	712.243.1934	712.243.6251
2-Mason City	641.424.4073	641.424.9342	5-Des Moines	515.725.0268	515.725.0218
3-Spencer	712.262.4177	712262.2901	6-Washington	319.653.2135	319.653.2856

3. UST Central Office: (work hours phone) 515.281.3634 or fax 515.281.8895
4. Use the Release Report Form to fax within 24 hours or 6 hours: Release Reporting Form

VIII. It's Good Business: Don't Make a Release More Expensive or Complicated

Reporting suspected and confirmed releases promptly as required and as soon as it is known not only protects the public and the environment, but can save the owner/operator money and lower cleanup costs. When a release is reported in a timely manner and the release investigation is begun quickly, further spread of the contamination can be prevented.

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[2] *"Hazardous condition"* means any situation involving the actual, imminent or probable spillage, leakage, or release of a hazardous substance onto the land, into a water of the state or into the atmosphere which, because of the quantity, strength and toxicity of the hazardous substance, its mobility in the environment and its persistence, creates an immediate or potential danger to the public health or safety or to the environment.